

### **REMARKS/ARGUMENTS**

The office action of May 11, 2004 has been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of the instant application are respectfully requested. Claims 1-41 remain pending in this application. Claim 42-46 have been canceled without prejudice or disclaimer.

The specification stands objected based on improper formatting of the section headings. Applicants have amended the sections headings herein. Withdrawal of the objection is requested.

Applicants have amended Fig. 11 to correct a spelling error. The claims have been amended to improve their clarity. Claim 11 was amended to depend from claim 10 rather than claim 9.

Claims 42-45 stand objected to because claim 42 ends with two “periods.” Since these claims have been canceled, the objection is deemed moot.

### **SECTION 102 REJECTION**

Claims 1-9, 12-26 and 29-34 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent no. 5,865,464 to Bhandari et al. (“Bhandari”). Applicants respectfully traverse this rejection.

#### ***Claims 1-8 and 18-25***

The action alleges that Bhandari discloses all the features of independent claims 1 and 18. To show the feature of identifying media objects stored in a database that are related to the captured media object, the action points to col. 4, lines 30-37 and col. 6, lines 1-8. However, col. 4, lines 30-37 of Bhandari merely describes the user inputting different types of metadata such as a natural language phrase or sentence (caption) for a particular captured image. Col. 6, lines 1-8 describes that each word of a caption is analyzed for attributes and roles. Notably, neither portion of Bhandari cited in the action provides any teaching or suggestion of identifying media objects stored in the database that are related to the captured media object. It necessarily follows that Bhandari also lacks a teaching or suggestion of inferring organization information for the media object *based upon information obtained from each of the stored media objects that are related to*

*the [captured] media object* as well as organizing the media object in the database *based upon the inference* as recited in claim 1.

Claims 2-8, which ultimately depend from claim 1, and claims 19-25, which ultimately depend from claim 18, are patentably distinct from Bhandari for the same reasons as their ultimate base claim and further in view of the novel and non-obvious features recited therein.

**Claims 9 and 26**

Independent claims 9 and 26 each call for, among other features, determining a date on which the media object was captured, wherein the date comprises one of the attributes of the media object; comparing the date with threshold date information; identifying media objects stored in the database that are related to the media object based upon the comparison; inferring organization information for the media object based upon information obtained from each of the stored media objects related to the media object, and organizing the media object in the database based upon the inference. To show the feature of comparing the date with threshold date information, the action points to col. 6, line 62 to col. 7, line 7 of Bhandari. According to Bhandari at col. 4, lines 30-40,

The user inputs description fields and caption to be associated with a particular image (metadata). The description fields may include . . . when image was taken . . .

These description fields will be stored as individual fields. Caption may include one or more natural language phrases or sentences without any grammar restrictions describing any characteristics of the image.

The caption is then processed S6. It takes the caption as input, performs the natural language processing and outputs the frame representation for the caption.

As ostensibly described in Bhandari, when an image was taken does not form part of the caption and thus is not part of the frame representation for the caption. In performing a search according to Bhandari, “the frame representation of the query is first matched role to role with S34 with the caption frames in the frame database.” Col. 6, lines 54-56. Thereafter, the matching results are weighted and the number and score of matched frames are analyzed against a predefined threshold. Importantly, since when the image was taken has no part in the caption frame, the results and their weighting also do not incorporate when the image was taken. As such, Bhandari neither teaches nor suggests the claim 9 features comparing a *date with threshold date*

*information and identifying media objects stored in the database that are related to the media object based upon the comparison.*

Also, claims 9 and 26 each call for inferring organization information for the media object based upon information obtained from each of the stored media objects related to the media object, and organizing the media object in the database based upon the inference. As discussed with respect to claims 1 and 18, Bhandari also lacks a teaching or suggestions of these features. For at least the aforementioned reasons, claim 9 is patentably distinguishable from Bhandari.

***Claims 12-14 and 29-31***

Claims 12 and 29 each call for, among other features, performing an inexact search of the database based upon at least one of the attributes of the media object to identify media objects stored in the database that are related to the media object; inferring organization information for the media object based upon information obtained from each of the stored media objects that are related to the media object; and organizing the media object in the database based upon the inference. The action relies on col. 7, lines 36-41 of Bhandari to show performing an inexact search of the database. Even assuming, but not admitting, that Bhandari shows performing an inexact search, the images found in the Bhandari search are ranked and displayed for viewing by a user. A user may select any of the resulting images to be printed, ordered, transmitted over network, stored in an album or further manipulated. Notably, Bhandari does not teach or suggest performing any action on the captured media object after performing this search, such as inferring organization information for the media object *based upon information obtained from each of the stored media objects that are related to the media object; and organizing the media object in the database based upon the inference* as called for in claims 12 and 29. Indeed, the Bhandari search involves a user inputting a query to perform a search rather than performing a search based upon at least one attribute of the captured media object. For at least these reasons, claims 12 and 29 are patentably distinct from Bhandari. Claims 13 and 14, which depend from claim 12, and claims 30 and 31, which depend from claim 29, are considered allowable over Bhandari for the same reasons as their base claim, and further in view of the advantageous features recited therein.

***Claims 15 and 32***

Claims 15 and 32 each recite, among other features, capturing a media object; comparing the media object with media objects that are stored in the database; identifying the stored media objects in the database that include features in common with the media object; inferring organization information for the media object based upon information, obtained from each of the media objects including features in common with the media object, representing organization in the database; and organizing the media object in the database based upon the inference. The action contends that col. 6, lines 62-63 and col. 10, lines 12-14 of Bhandari show comparing the media object with media objects that are stored in the database. To the contrary, nowhere does Bhandari teach or suggest comparing the media object with media objects that are stored in the database. Indeed, the Bhandari search involves a user inputting a query to perform a search rather than comparing a media object with media objects that are stored in the database as called for in claims 15 and 32. For substantially the same reasons discussed previously with respect to the claims already discussed above, Bhandari fails to teach or suggest the identifying, inferring or organizing steps of claims 15 and 32. As such, claims 15 and 32 are patentably distinguishable from Bhandari.

***Claims 16, 17, 34 and 35***

To the extent independent claims 16, 17, 34 and 35 have features similar to the independent claims discussed above, the reasons differentiating those claims from Bhandari apply to claims 16, 17, 34, and 35 as well. Accordingly, claims 16, 17, 34, and 35 are patentably distinguishable from Bhandari.

**SECTION 103 REJECTIONS**

Claims 10, 27, 35-41 and 46 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bhandari in view of Loui et al., “Software System for Automatic Albuming of Consumer Pictures,” published by ACM Multimedia Conference, 1999 (“Loui ‘99”). Claims 11 and 42-45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bhandari in view of Loui et al., “Automatic Image Event Segmentation and Quality Screening for Albuming Applications,” published by IEEE International Conference on Multimedia and Expo, 2000 (“Loui ‘00”). Claim 28 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over

Bhandari in view of Loui '99 and further in view of Loui '00. Applicants respectfully traverse these rejections. Notwithstanding the merits of its rejection, each of claims 42-46 has been canceled without prejudice or disclaimer.

***Claims 10 and 27***

The action alleges that Bhandari discloses all the features of claims 10 and 27, but for comparing the date on which the media object was captured with entries in a date book. To overcome this deficiency, the action relies on Loui '99. Specifically, the action contends that in Loui '99, the term "comprehensive chronicle" reads on the claim term "date book" pointing to p. 160, section 2, lines 1-7 and 15-16 and section 2.1, lines 3-7. While Loui '99 discloses automatically segmenting a set of pictures for layout on an album page, based on time and date information, nowhere does Loui '99 teach or suggest comparing the date on which the media object was captured with entries in a date book. At most, Loui '99 would appear to use time and date information to perform event clustering. The reference to "comprehensive chronicle" in Loui '99 is general background and does not suggest anything more than the fact that automatic albuming would involve clustering together pictures based on context. As such, for at least this reason, Loui '99 fails to overcome the deficiencies of Bhandari.

Moreover, applicants submit that one skilled in the art would not have combined Loui '99 with Bhandari. In this regard, Bhandari does describe, teach or otherwise relate to albuming as described in Loui '99. Rather, Bhandari is directed to a "method for using natural language for the description, search and retrieval of multi-media objects." Bhandari, Abstract. Since Bhandari only focuses on performing natural language queries on the caption description, does not compare the date on which an image was taken to anything and is not directed to albuming, one skilled in the art would not have modified Bhandari with Loui '99 as set forth in the action. *See e.g.*, discussions of Bhandari with respect to claims 9 and 26 *infra*.

***Claims 35-41***

Claim 35 is directed to a method of organizing media objects in a database. The method includes, among other features, detecting a capture time for each of the media objects to be organized; sorting the media objects based upon the capture time to generate a sorted list; comparing the capture time of each of the media objects with a reference value; and grouping the

media objects in the database based upon the comparison. The action alleges that Bhandari discloses detecting, but relies on Loui '99 to disclose the remaining steps of sorting, comparing and grouping. To show the step of comparing the capture time of each of the media objects with a reference value, the action points to p. 160, section 2.1, paragraph 1, lines 3-27 of Loui '99.

Contrary to the action's assertion, Loui '99 neither teaches nor suggests comparing the capture time of each of the media objects *with a reference value*. Instead, Loui '99 segments pictures using event clustering, which can involve analyzing pictures based on time differences to determine whether pictures are from the same event or different events. For at least this reason, the combination of Bhandari and Loui '99, even if proper, does not result in the claim 35 invention.

Moreover, for the same reasons set forth above with respect to claims 10 and 27, one skilled in the art would not have been motivated to modify Bhandari with Loui '99 in the manner set forth in the action.

Claims 36-41, which ultimately depend from claim 35, are patentably distinct from the combination of Bhandari and Loui '99 for the same reasons as their ultimate base claim and further in view of the novel and non-obvious features recited therein. For example, claim 40 calls for creating a new collection when the capture time of any one of the media objects from the sorted list is not within the predetermined time period from the updated reference value. To purportedly show this feature, the action points to col. 7, lines 36-41 of Bhandari. Yet Bhandari does not perform or suggest albuming as discussed above. Moreover, the cited passage of Bhandari merely describes what occurs when the results of a search are unacceptable based on a predefined threshold, namely a search involving expanded keywords is performed.

### ***Claims 11 and 28***

Claim 11 has been amended to depend from claim 10. Applicants submit that the combination of Bhandari with either Loui '99 or Loui '00, or both Loui '99 and Loui '00 does not result in the invention of claims 11 and 28 and would have been improper for substantially the same reasons set forth with respect to claims 10 and 27. Applicants note that the use of the term "global similarity" in Loui '00 does not provide a teaching or suggestion of global date book recited in claim 11.

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Reply to Office Action of May 11, 2004

**CONCLUSION**

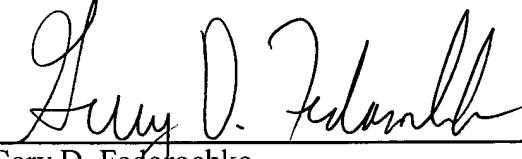
It is believed that no fee is required for this submission. If any fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733, accordingly.

All rejections having been addressed, applicants respectfully submit that the instant application is in condition for allowance, and respectfully solicit prompt notification of the same.

Respectfully submitted,

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**Figure 11**

